

SUPERQUIET 100

India's First and Only True Synthetic Grease That Will Not Leak into Windings and Cause Failure of HT Motors
HT Motor Applications in a Thermal Power Plant

A 660 MW unit runs 35–60 HT motors — ID, FD, PA fans, BFP, CEP, CW pumps, coal mills, FGD booster fans, and ash handling. HT motor failure is a unit-level event; a BFP motor trip drops the boiler, an ID fan motor trip forces load reduction. Bearing temperatures run 90–110°C on most HT motors; ordinary grease migrates into windings at this duty. SUPERQUIET 100 is specified by global motor OEMs (ABB, Siemens, CG, WEG, TMEIC equivalents) as a non-migrating factory-fill-grade grease.

Part A — Annual Cost of HT Motor Failures — 660 MW Unit — 35–60 HT Motors

- **HT motor failure rate:** 2–5% annual on private IPP fleet; 25–40% lubricant-attributable — 1–3 preventable failures/year per unit.
- **Motor replacement / rewind:** ₹60 lakh–1.5 cr/year per 660 MW unit. BFP motor ₹80 lakh–2 cr; ID/FD fan motors ₹40–90 lakh; coal mill motors ₹30–70 lakh.
- **Re-greasing + monitoring:** ₹8–15 lakh/year. Private IPPs run PD monitoring; CAT-based grease contamination sampling increasingly common.
- **Unit derate / trip cost:** ₹2–5 cr/year — the dominant cost. BFP motor failure drops the unit; ID fan motor failure forces derating; generation loss ₹25–60 lakh/hour.
- **Total:** ₹2.7–7 cr/year per 660 MW unit. A true synthetic non-migrating grease addresses ₹1–3 cr/year per unit.

Part B — HT Motor Applications

- **Boiler Feed** — BFP motor (largest HT motor on many units, 8–12 MW); BFP booster motor.
- **Circulating Water** — main CW pump motors (typically 2–4 × 3–5 MW per unit); ACW pump motors.
- **Draft System** — ID fan motor; FD fan motor; PA fan motor — all continuous HT motors.
- **Coal Mill** — coal mill drive motors (typically 400–700 kW, often at 3.3 kV HT).
- **Condensate System** — CEP motor; condensate transfer pump motor; makeup water pump motor.
- **FGD & Emission Control** — FGD booster fan motor; absorber recirculation pump motor; limestone slurry pump motor.
- **Ash Handling** — HCSD pump motor; ash slurry pump motor; bottom ash transport motor.
- **Cooling Tower** — induced-draft fan motor; cooling tower basin pump motor.
- **Coal Handling Plant** — stacker-reclaimer drive motor; crusher motor; wagon tippler motor.
- **Auxiliary** — DM plant RO high-pressure motor; service water pump HT motor; firewater pump motor.

Request a free 90-day plant trial — your reliability data will speak for itself.

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